

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



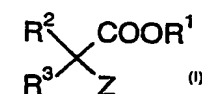
(43) International Publication Date
11 November 2004 (11.11.2004)

PCT

(10) International Publication Number
WO 2004/096747 A1

- (51) International Patent Classification⁷: **C07C 51/43**, 57/30
- (21) International Application Number: PCT/EP2004/004047
- (22) International Filing Date: 16 April 2004 (16.04.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/466,123 28 April 2003 (28.04.2003) US
- (71) Applicant (for all designated States except US): **BASF AKTIENGESELLSCHAFT** [DE/DE]; 67056 Ludwigshafen (DE).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **SAVA, Xavier** [FR/DE]; N3, 3, 68161 Mannheim (DE). **RÖPER, Michael** [DE/DE]; Pegauer Str. 10, 67157 Wachenheim (DE). **ORGILL, Colin** [GB/US]; 6217 Denain, Corpus Christi, TX 78414 (US). **COOPER, John** [GB/US]; 253 Cape Cod, Corpus Christi, TX 78412 (US).
- (74) Common Representative: **BASF AKTIENGESELLSCHAFT**; 67056 Ludwigshafen (DE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR THE SEPARATION OF PALLADIUM CATALYST FROM CRUDE REACTION MIXTURES OF ARYL ACETIC ACIDS OBTAINED BY CARBONYLATION



(57) Abstract: A process for the separation of palladium from solvent-free at room temperature solid crude reaction mixtures comprising aryl acetic acids of the general formula (I), wherein Z means phenyl, naphth-2-yl, 9H-fluoren-2-yl, substituted carbazol-2-yl, benzoxazol-5-yl, either of which can be substituted with H, C₁-C₈-alkyl optionally cyclic and optionally substituted with -F or -Cl, C₆-C₁₀-aryl optionally substituted with F or Cl OR⁴, COR⁵, F, -Cl; optionally substituted pyrrolyl or dehydropyrrolyl or 1-oxo-1,3-dehydro-isoindol-2-yl; R¹ means H or thiophenyl; which crude mixture is obtained by palladium catalyzed carbonylation, by adsorption of the palladium on solid adsorbents, characterized in that the adsorption is carried out in the absence of a reducing agent for palladium and at a temperature, where the crude reaction mixture is molten.